FIG. 1

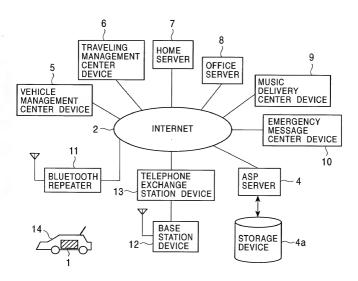
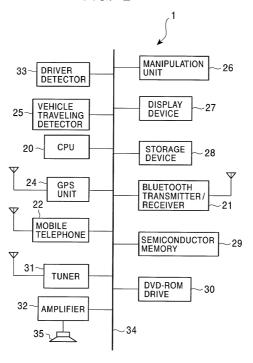


FIG. 2



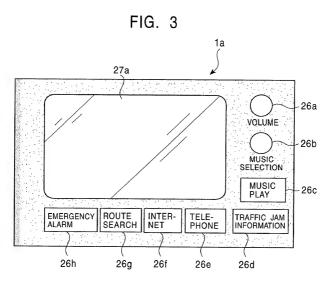


FIG. 4A

FIG. 4B

MUSIC PLAY

INTERNET RADIO MP3 DATA GROUND WAVE

RETURN

TRAFFIC JAM INFORMATION

RADIO
INTERNET
VICS
PREDICTION FROM PAST DATA
ATIS
SPEEDWAY PUBLIC CORPORATION GUIDE

RETURN

FIG. 4C

TELEPHONE

CONTACT ADDRESS LIST

RETURN

FIG. 4D

ROUTE SEARCH

DEPARTURE
DESTINATION
DATE AND TIME
LOCATION
CONDITION
PAST RECORD

RETURN

FIG. 4E

EMERGENCY ALARM

ACCESS POINT EMERGENCY CENTER AMBULANCE POLICE INSURANCE COMPANY REPAIR SHOP

RETURN

FIG. 5A

FIG. 5B

CAR PROFILE	DATABASE
USER PASSWORD	
LOGIN	HELP

CAR PROFILE DATABASE

APPLICATION DATABASE USER SETTING UPDATE DATA

FIG. 5C

FIG. 5D

APPLICATION

TRAVELING MANAGEMENT
EMERGENCY ALARM
MUSIC DELIVERY
ANTI-THEFT
VEHICLE MANAGEMENT
PUBLIC TELEPHONE
ROUTE SEARCH
MAIL
RETURN

DATA BASE

VEHICLE DATA TRAVELING DATA DRIVER DATA MUSIC DATA ADDRESS BOOK MAP DATA

RETURN

FIG. 5E

USER SETTING

SET ACCESS RIGHT ADD NEW USER CHANGE USER DATA SET ACCESS POINT

RETURN

FIG. 5F

UPDATE DATA

UNCONDITIONAL UPDATE (DATA MOVE) CONDITIONAL UPDATE (DESTINATION) CONDITIONAL UPDATE (COMMUNICATION CONDITION) ERASE (FORMAT)

RETURN

TRAVELING MANAGEMENT MAP

FIG. 6A

FIG. 6B

EMERGENCY ALARM

SERVICE CENTER
COMMUNICATION
MAIL TRANSMISSION ADDRESS
SENT DATA:
VEHICLE, DRIVER DATA

FIG. 6C

 FIG. 6D

ANTI-THEFT
CABIN TROUBLE SENSOR
TRAVELING REGION
USED TIME
DRIVER
CONTACT ADDRESS
SENT DATA:
VEHICLE, CURRENT POSITION,
ROUTE
RETURN



FIG. 6F



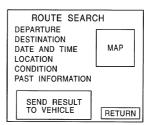


FIG. 6G

FIG. 6H

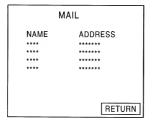




FIG. 7A

VEHICLE DATA

BODY NUMBER COLOR MODEL OWNER

MAINTENANCE INFORMATION

RETURN

FIG. 7B

TRAVELING DATA CURRENT POSITION

EAST LONGITUDE ******
NORTH LATITUDE ******

DATE TIME LOCA- SPEED CONDI-AND TION TION TIME

** ** ** ** ** **

RETURN

FIG. 7C

DRIVER DATA

NAME BLOOD TYPE SEX

AGE HEIGHT WEIGHT

COMMUNICATION

RETURN

RETURN

HFAD

FIG. 7D

DOWNLOAD

RETURN

FIG. 7E

MAP DATA

MAP NAME UPDATED DATE
SOUTH KANTO REGION
NORTH KANTO REGION
TOKYO METOROPOLITAN
KAWASAKI CITY
SAITAMA PREFECTURE
NIIGATA PREFECTURE
NIIGATA PREFECTURE

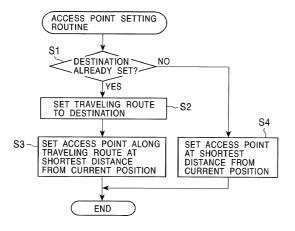
FIG. 7F

ADDRESS BOOK

NAME TELEPHONE ADDRESS
...
...

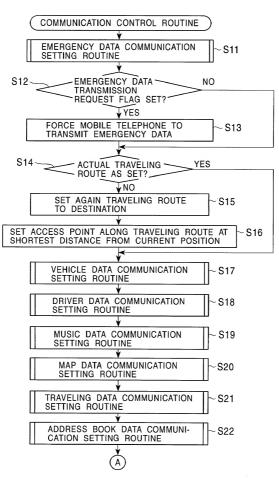
RETURN

FIG. 8

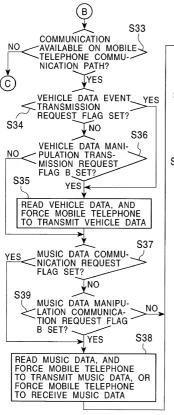


 U.S. Application 09/961,282 -- Mitsuo YASUSHI et al. Filed: September 25, 2001 -- Q66381 "MOBILE COMMUNICATION DEVICE AND METHOD"

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11 / 26FIG. 10 S17 COMMUNICATION NO AVAILABLE ON S25 BLUETOOTH COMMU DRIVER DATA TRANS-NICATION PATH? ★MISSION REQUEST Iyes FLAG A SET? S26 VEHICLE DATA PERIOD- YES YES ✓ICAL TRANSMISSION READ DRIVER DATA, AND REQUEST FLAG SET? S18 FORCE BLUETOOTH NO TRANSMITTER/RECEIVER S20 TO TRANSMIT DRIVER DATA VEHICLE DATA MANI-∠PULATION TRANS-S27 MISSION REQUEST MAP DATA PERIODICAL FLAG A SET? TRANSMISSION S19 YES 🗸 REQUEST FLAG SET? S28 TYES READ VEHICLE DATA AND FORCE BLUETOOTH TRANS-READ MAP DATA, AND MITTER/RECEIVER TO FORCE BLUETOOTH TRANSMIT VEHICLE DATA TRANSMITTER/RECEIVER TO TRANSMIT MAP DATA S21 MUSIC DATA PERIOD-NO S29 ✓ICAL TRANSMISSION TRAVELING DATA REQUEST FLAG SET? PERIODICAL TRANS- > S22 MISSION REQUEST, YES FLAG SET? S30 READ MUSIC DATA AND YES FORCE BLUETOOTH TRANSMITTER/RECEIVER READ TRAVELING DATA, AND TO TRANSMIT MUSIC DATA FORCE BLUETOOTH TRANS-MITTER/RECEIVER TO TRANSMIT TRAVELING DATA S23 MUSIC DATA MANIPU-NO LATION COMMUNICA-S31 TION REQUEST FLAG DRIVER DATA TRANS-A SET? -MISSION REQUEST S24 YES FLAG SET? S32 YES READ MUSIC DATA AND FORCE BLUETOOTH TRANSMITTER/ READ DRIVER DATA, AND RECEIVER TO TRANSMIT MUSIC FORCE BLUETOOTH TRANS-DATA, OR FORCE BLUFTOOTH MITTER/RECEIVER TO TRANSMITTER/RECEIVER TO TRANSMIT DRIVER DATA RECEIVE MUSIC DATA



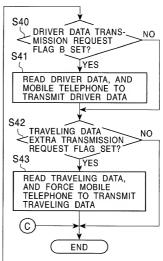
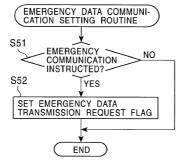
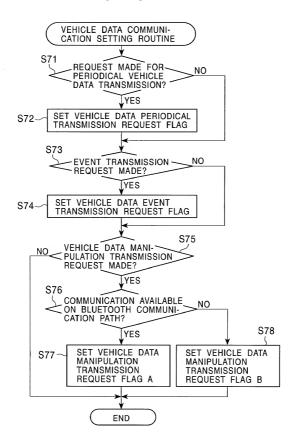


FIG. 12





 $15 \angle 26$

FIG. 14

TYPE	UPDATE CYCLE	PRECEDING UPDATE DATE AND TIME
VEHICLE DATA	ONE WEEK	XXXX : YY : ZZ 12:10
DRIVER DATA	START OF VEHICLE	XXXX : YY : ZZ 11:03
MUSIC DATA	TWICE A DAY	XXXX : YY : ZZ 12:00
MAP DATA	ONCE A MONTH	XXXX : YY : ZZ 09:45
TRAVELING DATA	EVERY 10 MINUTES	XXXX : YY : ZZ 12:50
ADDRESS BOOK DATA	ONCE A DAY	XXXX : YY : ZZ 10:10
EMERGENCY DATA	OCCURRENCE OF EMERGENCY	XXXX : AY : GH 17:30

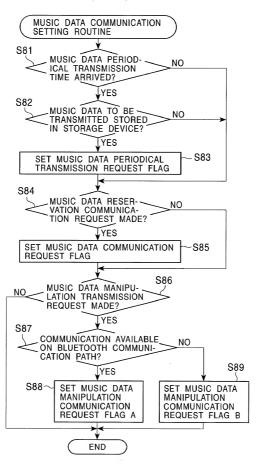


FIG. 16

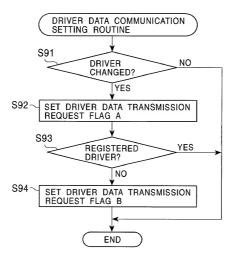


FIG. 17

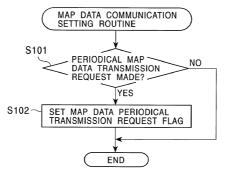
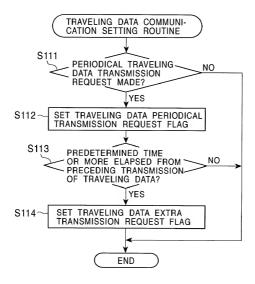
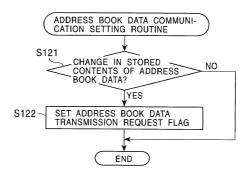


FIG. 18





DEVICE OR SERVER TYPE	VEHICLE MANAGEMENT CENTER	TRAVELING MANAGEMENT CENTER	HOME SERVER	OFFICE SERVER	MUSIC DELIVERY CENTER	EMERGENCY MESSAGE CENTER
	DEVICE	DEVICE			DEVICE	DEVICE
VEHICLE DATA	0	0	0	0	×	0
DRIVER DATA	0	0	0	0	0	0
MUSIC DATA	×	×	0	0	0	×
MAP DATA	×	0	0	0	×	0
TRAVELING DATA	0	0	0	×	×	0
ADDRESS BOOK DATA	×	×	0	0	×	×
EMERGENCY DATA	×	×	0	×	×	0

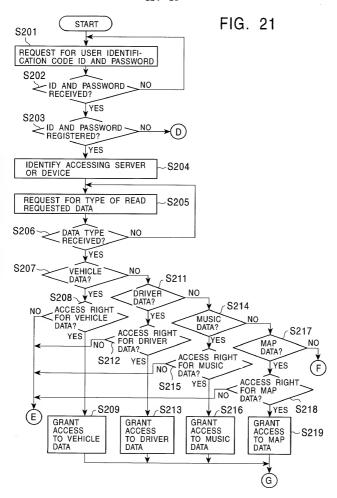
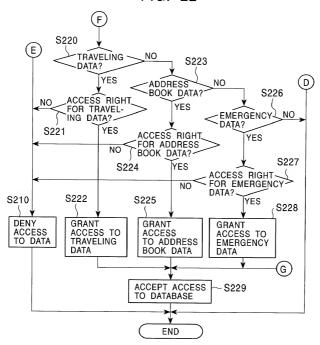


FIG. 22



USER GROUP TYPE	OWNER	FAMILY MEMBER	FRIEND	SECURITY	POLICE	FIRE	REPAIR SHOP
VEHICLE DATA	0	0	0	0	0	0	0
DRIVER DATA	0	0	0	0	×	0	×
MUSIC DATA	0	×	0	×	×	×	×
MAP DATA	0	0	0	0	0	×	×
TRAVELING DATA	0	0	×	×	×	×	0
ADDRESS BOOK DATA	0	×	×	×	×	×	×

FEBIOS.

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